Continuous Professional Development and Lifelong Learning: Needs Assessment and Way Forward for Hong Kong's Business and Industries

Peter P. Yuen   Jason K.Y. Chan   Florence H.C. Ho   Vincent T. Law
The Hong Kong Polytechnic University

Abstract

This Study aims to assess the needs of Hong Kong's industries and businesses for continuous professional development (CPD) and lifelong learning (LLL) as well as the state of development of organizational learning (OL) in selected industries and businesses. The Study consists of two stages. The qualitative stage adopts a data-driven approach through which the analytical framework is derived from the data collected from focus group discussions and in-depth interviews of employees, employers, relevant officials, and course providers. A total of 133 informants participated in the exercise. The text data is organized with the aid of the NVivo software. The subsequent quantitative stage collects data via a questionnaire survey. A total of 544 completed questionnaires were received.

Results show that industries and businesses in Hong Kong show concern for CPD, and recognize its importance. Government, industry/business sector, and training/education providers have put in effort in setting up a series of mechanisms to support CPD and LLL. Courses that are in high demand -- such as language and management-related topics -- have ample supply. Programmes for the service industry are not in short supply. For more specialized or manufacturing-related courses, the supply tends to be scarce. The importance of non-credit bearing short courses is recognised. All are supportive of Government's Recognition of Prior Learning (RPL) scheme, as well the Qualifications Framework (QF) and Credit Accumulation and Transfer (CAT) schemes. Most working individuals are familiar with Continuing Education Fund (CEF) and many have received support from the Fund. Not many companies provide flexible work arrangements for employees undertaking training. There is room for most companies to increase their training resources. Under-staffing is a common problem.

Government is recommended to take the lead in coordinating various stakeholders for CAT. It should further promote QF, and establish mechanisms to enable credit accumulation on a lifelong basis. It should review CEF's policy details, including the range of eligible subjects and the amount of entitlement for each eligible applicant. Employers are recommended to provide flexible working hours for employees pursuing training or further study.

Keywords: continuous professional development, lifelong learning, organizational learning

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Introduction

It is generally accepted that in a rapidly changing world individuals and organizations need to constantly acquire new knowledge and skills to remain competent and productive. Lifelong learning (LLL), continuous professional development (CPD), and cultivating organizational learning (OL) have been widely advocated throughout the world (Young 2014; Hong Kong Institute of Engineers 2010; UNESCO 2006; OECD 2010). In Hong Kong, many education and training bodies have been offering such programmes, and the Government has also launched a number of measures -- such as the Continuing Education Fund, the Employees Retraining Board, the Qualifications Framework — to support this important initiative (Lee and Cribbin 2014; University Grants Committee 2010, p. 47).

A number of studies, mostly questionnaire surveys, on the demand of LLL/CPD have been conducted by various organizations (HKU School of Professional and Continuing Education 2012, Committee on Management and Supervisory Training 2011, Hong Kong Institute of Human Resource Management 2012). These surveys examine the participation rate, the preferred subject areas, the programme mode, and the training budget of companies.

However, there is a lack of more in-depth analysis of the LLL/CPD market in Hong Kong to determine whether or not the needs of individuals and businesses/industries are currently being met, the major barriers to learning, and the difficulties encountered by the providers.

This Study aims to (1) assess the needs of Hong Kong's industries and businesses for continuous professional development (CPD) and lifelong learning (LLL); (2) to review the existing CPD and LLL programmes and schemes, and to identify areas for improvement; (3) to assess the state of development of organizational learning (OL) in Hong Kong companies; and (4) to make recommendations regarding CPD, LLL and OL to the Government, and businesses and industries in Hong Kong.

This Study adopts the "lifelong learning framework" of The Organization for Economic and Co-operation and Development (OECD) that suggests action on five systemic features: (a) improving access, quality and equity; (b) ensuring foundation skills for all; (c) recognising all forms of learning, not just formal courses of study; (d) mobilizing resources, rethinking resource allocation across all sectors, settings and over the life cycle; and (e) ensuring collaboration among a wide range of partners. For the purpose of this study, the working definitions of the key constructs are described as follows: continuous professional development (CPD) is defined as the systematic maintenance, improvement and broadening of relevant knowledge and skills, and the development of these qualities necessary for the successful carrying out of professional duties throughout one's career (HKIE, 2010). An ILO framework describes CPD programmes as: (a) school-based; (b) participatory; (c) emphasis on practice and content; and (d) continuous and ongoing (ILO, 2012). Lifelong learning (LLL) is defined as all learning activities, whether formal or informal, continuously undertaken with the aim of improving knowledge, skills and competence for individuals (UNESCO, 2006). Organizational learning (OL) is defined as the way firms organize knowledge around their activities and within their culture, and expand their capabilities by fostering learning among and improving the skills of the workforce (OECD, 2010). Under OECD's OL framework, organizations should: (a) make sense of and connect to their environment; (b) promote an inquiry climate where organizational members challenge and experiment to improve organizational functioning: (c) provide strategic leadership to learning, instill behaviour and culture where learning is embraced; (d) create continuous learning opportunities, promote collaboration and team learning; and (e) establish systems to capture and share learning.

Methodology

This research is a two-stage study which applies both qualitative and quantitative methods: Phase 1 is the qualitative stage, in which data were collected from focus group discussions and in-depth interviews. All text data were content analyzed and then organized via the NVivo software. Phase 2 is the subsequent quantitative stage, in which data were collected from a questionnaire survey. Data from this stage were analyzed using SPSS.

Qualitative Data Collection

In the qualitative stage, informants were asked to provide views relating to various features of CPD, LLL, and OL. Informants came from two categories. Category I — demand-side informants, nominated by institutional members under The Professional Validation Council of Hong Kong Industries (PVCHK), The Professional Validation Centre of Hong Kong Business Sector (PVCBS), and individual members of the CEO Club of Institute for Entrepreneurship (IfE) of The Hong Kong Polytechnic University (PolyU). Participants came from different positions/levels[1] and sectors[2]. Category II — supply-side informants, include the Government and public officials with relevant policy or regulatory responsibilities, as well as leading members of educational and/or professional institutes providing CPD and LLL programmes.

A total of 133 informants from 80 selected organizations in the industry/business and education sectors participated in the Study. The 118 informants from the industry/business sector participated in one of the 13 focus group sessions, or one of the five in-depth interviews. A total of 13 training/education organizations[3] were visited by the investigators and conducted in-depth interviews with 15 of their representatives.

Analytical Framework: The qualitative stage followed a data-driven approach — the Grounded Theory[4] — through which an analytical framework was derived from the data received, following content analysis of the transcripts. A schematic tree was drawn up to depict the detailed hierarchy and relations of different themes[5] and categories[6] of views collected as shown in Exhibit 1.

Exhibit 1: Schematic Framework for Analysis of Views Received

1. Definitions	2. Content	3. Form	4. Enabling Practices & Barriers	5. Recommendations	6. Organizational Learning	7. Other Views
1.1 Definition of Continuous Professional Development (CPD)	2.1 General Topics	3.1 Formal (Off-the-job)	4.1 Resources	5.1 General Recommendations	6.1 Formal	7.1 Purpose
1.2 Definition of Lifelong Learning (LLL)	2.2 Management	3.2 Informal (On-the-job)	4.2 Access / Equity	5.2 Policy Recommendations (e.g. government policies)	6.2 Informal	7.2 Other Views
1.3 Definition of Organizational Learning (OL)	2.3 Functional Topics		4.3 Culture			
1.4 Interrelation of CPD,LLL and OL	2.4 Personal Development		4.4 Incentives			
			4.5 Coordination of Stakeholders			

The views expressed in each summary of focus group discussion and interview were organized into "text units". A "text unit" is a phrase, a sentence or a sequence of sentences representing a point made by the informants. Each view expressed in the summaries of focus group discussions was coded based on the established themes and categories. NVivo, a qualitative data analysis computer software, was employed to organize, analyse and summarise the coded data according to specific categories within the analytical framework. Excerpts of comments representing major views on various aspects were displayed and "salient points" were drawn up to facilitate the identification of key points.

Results: Views collected were grouped under 7 themes and 21 categories, and 70 subcategories. The 7 themes and their associated frequency counts in terms of text units totaling 2,465 are shown in **Exhibit 2**.

Exhibit 2: Seven Key Themes of Views in Descending Order
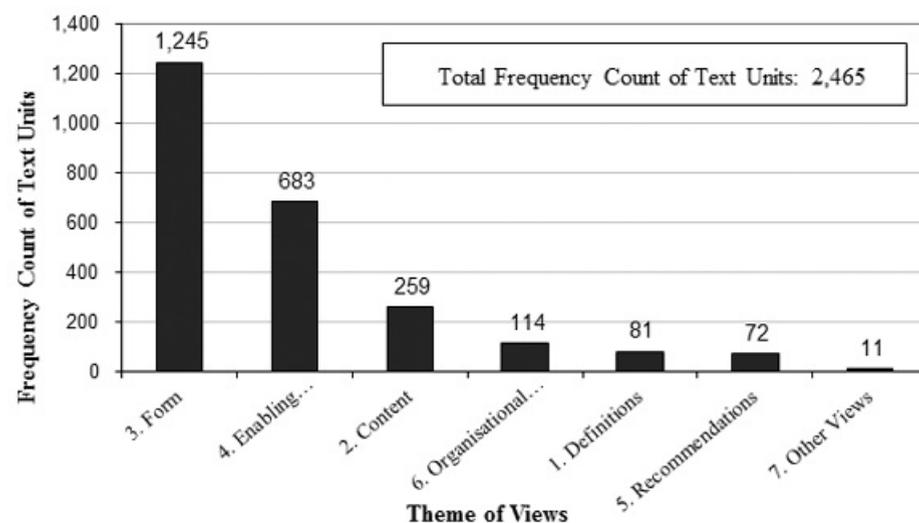
The frequency counts in terms of "text units" of the top 10 categories of views are shown in **Exhibit 3**. Themes and Categories receiving high frequency counts indicate that ideas under them were put forward many times by informants.

Exhibit 3: Top 10 Categories of Views in Descending Order

Item	Category of Views	Frequency Count of Text Units	Percentage of Total Number of Text Units
1	3.1 Form - **Formal (Off-the-job)**	1,028	41.7%
2	4.1 Enabling Practices & Barriers - **Resources**	280	11.4%
3	3.2 Form - **Informal (On-the-job)**	217	8.8%
4	4.4 Enabling Practices & Barriers - **Incentives**	183	7.4%
5	2.3 Content - **Functional Topics**	121	4.9%
6	4.2 Enabling Practices & Barriers - **Access or Equity**	108	4.4%
7	4.3 Enabling Practices & Barriers - **Culture**	99	4.0%
8	6.1 Organisational Learning - **Formal**	85	3.4%
9	2.2 Content - **Management**	79	3.2%
10	2.1 Content - **General Topics**	61	2.1%

As shown in **Exhibit 3**, issues that came up most during the focus group and in-depth interview discussions were related to off-the-job training — attending courses organized by providers external to the company. Issues associated with resources devoted to the promotion of LLL/CPD were the second most discussed topic. Issues related to on-the-job training, the content of training programmes, organizational culture for LLL/CPD, and Organization Learning were also extensively discussed.

Quantitative Data Collection

In the quantitative stage of the Study, the design of the questionnaire was based on the findings from the qualitative stage. The questionnaire focused on the needs for future CPD and LLL identified by the informants of the qualitative stage. Respondents were selected from the participating organizations under PVCHK, PVCBS, and individual members of the CEO Club of PolyU's IfE. A total of 544 completed questionnaires were collected: 348 printed questionnaires, 170 online questionnaires, and 26 returned by emails. Responses to the questionnaire were codified and then analysed with "Statistical Package for the Social Sciences" (SPSS). The profile of the respondents is shown in **Exhibit 4**.

Exhibit 4: Respondent Profile of Questionnaire Survey
(a) Sector

No. of Employed Persons by Industry	Frequency Count	%
(1) Manufacturing	62	11.40
(2) Construction	47	8.64
(3) Import/Export, Wholesale & Retail Trades	121	22.24
(4) Accommodation & Food Services	4	0.74
(5) Transportation & Storage Services, Postal & Courier Services	8	1.47

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(6) Information & Communications	15	2.76
(7) Financing & Insurance	66	12.13
(8) Professional, Scientific and Technical Services	37	6.80
(9) Administrative& Support Services	25	4.60
(10) Public Administration	49	9.01
(11) Education	44	8.09
(12) Social & Personal Services	7	1.29
(13) Cultural, Entertainment & Recreational	7	1.29
(14) Others	34	6.25
No Response	18	3.31
Total	**544**	**100.00**

(b) Occupation

No. of Employed Persons by Occupation	Frequency Count	%
(1) Proprietors	29	5.33
(2) Managers & Administrators	157	28.86
(3) Professionals	81	14.89
(4) Technical Workers	36	6.62
(5) Clerical Support Workers	75	13.79
(6) Service Workers & Sales Workers	109	20.04
(7) Craft & Related Workers	2	0.37
(8) Plant & Machine Operators & Assemblers	2	0.37
(9) Elementary Occupations	4	0.74
(10) Others	24	4.41
No Response	25	4.60
Total	**544**	**100.00**

(c) Number of Persons Engaged / Size of Establishment

Size of Establishment (in terms of number of persons engaged)	Frequency Count	%
(1) Less than 10	80	14.71
(2) 10 to 49	117	21.51
(3) 50 to 99	33	6.07
(4) 100 to 499	82	15.07
(5) 500 and above	209	38.42
No Response	23	4.23
Total	**544**	**100.00**

(d) Age Group (years)

(years)	Frequency Count	%
(1) < 20	20	3.68
(2) 20 - 29	131	24.08
(3) 30 - 39	163	29.96
(4) 40 - 49	122	22.43
(5) 50 - 59	79	14.52
(6) 60 or above	7	1.29
No Response	22	4.04
Total	**544**	**100.00**

(e) By Education

No. of Persons Engaged by Education	Frequency Count	%
(1) Junior High	28	5.15
(2) Senior High/Matriculated	120	22.06
(3) Certificate/Diploma	29	5.33
(4) Associate Degree/Higher Diploma/Higher Certificate	61	11.21
(5) Bachelor Degree Holder	190	34.93
(6) Master's and above	96	17.65
No Response	20	3.68
Total	**544**	**100.00**

Results: Responses to the 19 questions in the questionnaire are summarized in **Exhibit 5**.

Exhibit 5: Results of Questionnaire Survey

	Questions	Questionaires Received	<1> Strongly Disagree (%)	<2> Disagree (%)	<3> Neutral (%)	<4> Agree (%)	<5> Strongly Agree (%)	<6> Nil (%)	Average
1	Unable to identify suitable suppliers	544	29 (5.3)	65 (11.9)	229 (42.1)	134 (24.6)	82 (15.1)	5 (0.9)	3.32
2	The course is based on e-learning, I would still apply	544	87 (16.0)	130 (23.9)	152 (27.9)	104 (19.1)	66 (12.1)	5 (0.9)	2.87
3	I wish I can obtain the qualification through CAT	544	12 (2.2)	32 (5.9)	154 (28.3)	182 (33.5)	159 (29.2)	5 (0.9)	3.82
4	I understand the QF scheme	544	82 (15.1)	95 (17.5)	189 (34.7)	114 (21.0)	50 (9.2)	14 (2.6)	2.92
5	Will apply for courses outside QF	544	53 (9.7)	72 (13.2)	208 (38.2)	139 (25.6)	58 (10.7)	14 (2.6)	3.15
6	Will apply those courses at QF Level 4	544	71 (13.1)	82 (15.1)	198 (36.4)	132 (24.3)	46 (8.5)	15 (2.8)	3.00
7	I will get salary increment or advancement after completing QF courses	544	77 (14.2)	74 (13.6)	229 (42.1)	100 (18.4)	47 (8.6)	17 (3.1)	2.94
8	RPL scheme is helpful	544	40 (7.4)	55 (10.1)	225 (41.4)	132 (24.3)	74 (13.6)	18 (3.3)	3.28
9	My organization has provided sufficient resources for me to pursue further study	544	83 (15.3)	79 (14.5)	202 (37.1)	125 (23.0)	40 (7.4)	15 (2.8)	2.92
10	As a result of undertaking further study, I will have career advancement	544	69 (12.7)	114 (21.0)	210 (38.6)	107 (19.7)	29 (5.3)	15 (2.8)	2.84

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11	As a result of undertaking further study, I will have salary increment	544	94 (17.3)	114 (21.0)	199 (36.6)	99 (18.2)	30 (5.5)	8 (1.5)	2.73
12	If I pursue further study, my organization would let me have flexible work schedule	544	84 (15.4)	94 (17.3)	180 (33.1)	138 (25.4)	42 (7.7)	6 (1.1)	2.93
13	If I pursue further study, my organization would adjust my workload	544	122 (22.4)	127 (23.3)	173 (31.8)	82 (15.1)	31 (5.7)	9 (1.7)	2.58
14	Without sponsorship or time-off, I still want to study	544	14 (2.6)	44 (8.1)	172 (31.6)	197 (36.2)	108 (19.9)	9 (1.7)	3.64
15	I will study with partial sponsorship	544	10 (1.8)	23 (4.2)	113 (20.8)	238 (43.8)	147 (27.0)	13 (2.4)	3.92
16	I understand the details of the CEF	544	34 (6.3)	70 (12.9)	164 (30.1)	159 (29.2)	108 (19.9)	9 (1.7)	3.44
17	I have received support from CEF	544	175 (32.2)	59 (10.8)	87 (16.0)	77 (14.2)	139 (25.6)	7 (1.3)	2.90
18	I have given up further study as I cannot afford the fees	544	115 (21.1)	74 (13.6)	145 (26.7)	103 (18.9)	99 (18.2)	8 (1.5)	2.99
19	I have given up further study because the teaching medium is English	544	186 (34.2)	89 (16.4)	145 (26.7)	67 (12.3)	48 (8.8)	9 (1.7)	2.44

The results shown in **Exhibit 5** indicate that close to 40% of the respondents had difficulties finding a suitable provider for a course that they wish to enroll. Close to 30% of the respondents would not like to enroll in a purely on-line programme. There is general support for the Recognition of Prior Learning (RPL) scheme, and for the Credit Accumulation and Transfer (CAT) scheme. Only around 30% of the respondents thought that they understood the Qualification Framework (QF) details. Around 36% of the respondents indicated that they would still enroll on a course that is not registered the QF scheme. Around 32% of the respondents indicated that they would enroll in a course at QF Level 4 (below Bachelor's degree level). Regarding employers' support for employees to undertake LLL/CPD, less than 30% of the respondents felt that their organization had provided adequate resources for them, that the company would adjust their workload, and that they would have greater career advancement or salary increments upon completion of programme. Around 33% of the respondents indicated that their company would let them have a more flexible work schedule should they undertake LLL/CPD programmes. However, more than 55% of the respondents indicate that they would still undertake LLL/CPD programmes even without any support from employers. Over 70% indicated that they would study if granted partial subsidies from employers. Close to 40% of the respondents indicated that they understood the details of the Continuing Education Fund Scheme (CEF), and a similar percentage indicated that they had taken advantage of the CEF scheme. Around 37% of the respondents indicated that they did not enroll in a programme because they could not afford the tuition fee. Only around 20% of the respondents indicated that they did not enroll in a programme because the medium of instruction was English.

Discussion

Based on the results of the focus group discussions, in-depth interviews, and the questionnaire survey, the following observations are drawn. Views that received relatively high frequency count in terms of number of mentions and/or corroborated by the results of the questionnaire survey are highlighted.

Needs and Demand for CPD, LLL and OL

Industries and businesses in Hong Kong show concerns for Continuous Professional Development, and recognize its importance. However, they do not share the same level of concern for Organizational Learning and employees' needs for Lifelong Learning.

The programmes that are in most demand are language training, communication and interpersonal skills, team building and management-related topics. Programmes related to functional topics, including industry-specific technical knowledge, product knowledge, sales and related regulatory/legal issues, are also in demand. Enterprises involving in manufacturing also require training courses for more specialized technologies for their employees.

Industries and businesses would like training/education providers to offer courses that could cater to their different needs. They also hope that those industry-specific skills can be given academic recognition, made more standardized and systematic, and having a system that can facilitate their employees' professional development. Some informants expressed their concerns that some of the employees might be deprived of the opportunity to study because of their low English proficiency or the lack of formal academic qualifications. Some informants were of the view that programmes offered by the training/education providers are often too theoretical, not necessarily meeting industry's needs, and requiring a long time to complete.

Current State of CPD and LLL

Infrastructure for CPD and LLL

Government, industry/business sector, and training/education providers have put in effort in setting up a series of mechanisms to support Continuous Professional Development and Lifelong Learning. Examples include the Qualifications Framework (QF), Credit Accumulation and Transfer (CAT), Recognition of Prior Learning (RPL) and Continuous Education Fund (CEF). Most universities have a continuing education arm, and industry and business associations also organize training activities on a regular basis.

Supply and Demand

In terms of programme content, those with high demand — such as language and management-related topics — have ample supply, catering for participants' different requirements in terms of formats, durations, and levels. Generally speaking, programmes for the service industry are not in short supply. For more specialized or manufacturing-related courses, the supply tends to be scarce. Some training/education providers have, in the past, tried to offer such programmes, but they often encountered low enrolment, resulting in financial non-viability. As all continuous professional development programmes are run on a self-financing basis, the supply would naturally

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be short, and unable to meet the needs of some of these enterprises. E-learning is very common, whether it is provided through the company's intranet, or employees enrolling in external e-courses with company's sponsorship. However, as e-learning has its limitations, it is still not that well received.

Short Courses and Informal Learning

In terms of learning mode, the industry/business sector and training/education providers all recognize the importance of non-credit bearing short courses, which are also the most popular form of learning for employees. They would, of course, be even more popular if they can earn academic credits as well. In general, the industry/business sector and the training/education providers are all supportive of Government's Recognition of Prior Learning scheme. Informal learning is extensively practised in most companies, including organizing in-house seminars, workshops, mentoring by experienced staff, visits to related organizations, job rotation, and overseas placements.

Courses Leading to Academic Awards

The Industry/business sector and training/education providers are aware of and supportive of both QF and CAT systems. As conventional academic programmes generally require a long time to complete, it would be most desirable if short courses can be incorporated into the QF framework, and credits earned from these short courses can be accumulated under the CAT system, providing a more flexible study pathway for employees. However, most of the informants are of the opinion that Government's efforts to promote QF and RPL are inadequate. Many employers, employees, and even some training/education providers are not familiar with QF's level designation mechanisms and operational details. Most employers do not specify QF Levels as their recruitment requirement, nor aligned attainment of QF courses with their remuneration or promotion system. Many industries are still not included in the QF system.

Insufficient Support from the Companies

Not many companies provide flexible work arrangements for employees undertaking training or lifelong learning. There is room for most companies to increase their training resources. Under-staffing is a common problem. Some employers are not willing to provide training to their employees for fear of losing them. Training opportunities tend to be less for employees in the retail industry, in supportive roles, and in lower ranks.

Continuing Education Fund (CEF)

Most working individuals are familiar with CEF and many have received support from the Fund. However, the research data shows that there were a good number of cases where individuals had to forgo their plans to pursue further study because they could not afford the tuition fees. It shows that those lower level employees might not be able to afford the tuition fees charged by self-financing institutions in the market place.

Many programmes are not eligible for CEF. The HK$10,000 lifetime limit is hardly enough for an individual who intends to seriously pursue Lifelong Learning.

Organizational Learning

Industry/business sector and training/education providers all recognize the importance of Organizational Learning and Knowledge Management (KM), and agree that they should be pursued actively. However, as of now, very few enterprises are implementing them in a systematic manner.

Recommendations

The Government should take the lead in coordinating various stakeholders for CAT, and communicate with businesses and industries as well as education providers. The Government should further promote QF, and establish mechanisms to further facilitate credit accumulation on a lifelong basis. The Government should also take the lead in including QF levels in all of its recruitment exercises. The Government should review QF's accreditation procedures and the fee-charging system, regularly revise the Specification of Competency Standards, provide incentives to stakeholders, and encourage industry and business associations to align their qualifications with QF. Moreover, the Government should provide funding support for training programmes for selected industries which are considered to be important for Hong Kong's economy, as many such programmes are often not viable on a self-financing basis. The Government should finalize the implementation details for CAT. The Government should review CEF's policy details, including the range of eligible subjects and the amount of entitlement for each eligible applicant.

The industrial/business sector should encourage companies to provide flexible working hours for employees pursuing training/further study, and organize training activities during working hours. More companies should provide financial support to employees pursuing training/further study, and allow them to undertake studies during working hours. Companies should align training or further study (in particular those within QF) with salary increment and promotion. Companies should actively cultivate an internal learning culture. Companies should promote Organizational Learning in a systematic manner. More sectors should consider implementing a licensing system, requiring practitioners to undertake continuous professional training, as part and partial of quality assurance. Companies can consider collaborating with academic institutions to run specialized programmes.

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Notes

1. The four position levels of informants are as follows: owners/executives/senior managers, human resources personnel, supervisory staff; and operational staff.

2. The two broad types of sectors were "manufacturing businesses/industries" and "service business/industries", the former included include jewelry, watches, electronics and electrical appliances, mechanical equipment and metals, mould manufacturing, spare parts, plastics, textile, toys, and so on while the latter included finance, trading, retails, business consulting, beauty, property agents, and so on.

3. The training/education organizations were the Education Bureau of the Hong Kong Special Administrative Region Government, The University of Hong Kong, The Chinese University of Hong Kong, The Hong Kong Polytechnic University, City University of Hong Kong, The Open University of Hong Kong, Vocational Training Council, Hong Kong Productivity Council, The Hong Kong Management Association, Continuing Professional Development Alliance, Hong Kong Institute of Human Resource Management, and Employees Retraining Board.

4. The Grounded Theory is a systematic qualitative research methodology that emphasizes the generation of theory from data during the research process. Data drive the development of the analytical framework and the subsequent analytical process.

5. A "theme" is a distinct topic of interests emerged from the views of the respondents in qualitative analysis.

6. A "category" of views is a group of views under a particular theme sharing some common characteristics.

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